

## Water in the Solar System Water On Earth



- Where is it located?
- Why is it studied?
- How is studied with Remote Sensing?



## Where is water located?



Oceans: ~97%

■ Glaciers and polar ice: ~2%

■ Underground waters: ~.9%

■ Lakes and rivers: ~0.009%

■ Atmosphere: ~0.001%

■ Biosphere: ~0.0001%

Total: 1.46x10<sup>9</sup> km<sup>3</sup>



## Why is water studied?

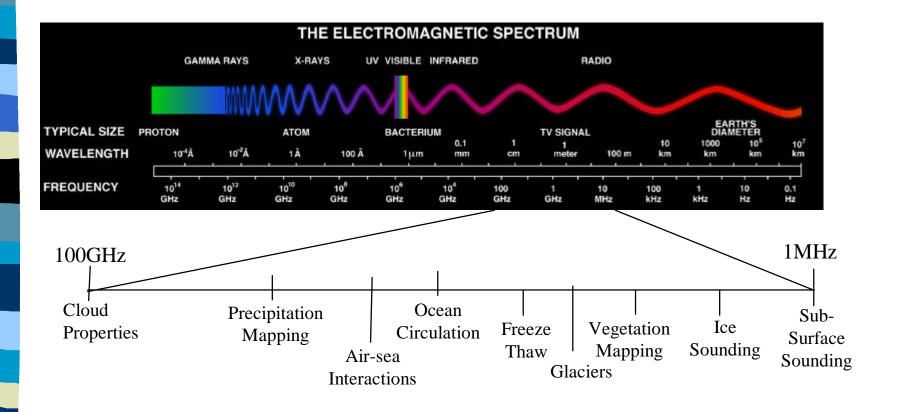


- Water is a resource
  - Of the total water people use globally, about 65% is used to irrigate crops, 25% is used by industry and the remaining 10% for domestic and municipal use
- Water vapour contributes significantly to the heating of the atmosphere
- Ocean circulation impacts our weather
- Drought and Flooding Disasters
  - In the U.S. alone, the 1988 Midwest drought cost \$5.5 B; 1993 Midwest floods cost \$4.9 B; 1995 California floods cost \$3.3 B



## How is water studied using Remote Sensing?





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